Remarks

I. Status of the Application and Claims

As originally filed, the present application had a total of 12 claims. During previous prosecution, claim 5 was cancelled and new claims 13-16 were added. In the present response, claims 2, 11 and 12 have also been cancelled. Thus, the claims now pending are 1, 3, 4, 6-10 and 13-16.

II. The Amendments

Claims 1 and 16 have been amended to clarify the subject matter being claimed. The word "modified" was added to the portions of the claim referring to the nucleotide sequence of DNA (b) to distinguish this from the nucleotide sequence of DNA (a). Claims 8 and 9 were amended so that they are no longer dependent upon cancelled claim 5 and claims 2, 11 and 12 have been cancelled. In addition, minor amendments were made to claims to correct grammatical oversights. Apart from the claims, the specification was amended to better clarify the exact priority documents that have been relied upon for priority.

None of the amendments made herein add new matter to the application, and their entry is therefore respectfully requested.

III. Comments Regarding Information Disclosure Statement

On page 2 of the Office Action, the Examiner indicates that three documents that were previously cited in the Information Disclosure Statement submitted in September 2004 have not been considered because legible copies were not filed. Applicants request reconsideration. Applicants are submitting herewith another copy of the two EP documents that the Examiner has crossed through on the 1449 form returned with the last Office Action. It is respectfully pointed out that the two EP patent publications were acknowledged previously by the PTO (prior Examiner Loeb) as seen from initialed and dated PTO 1449 type form (courtesy copies attached). Applicants further respectfully point out they submitted the ISR and IPER with their U.S. National Phase application when entering the national phase. This is confirmed by PTO PAIR. The ANNEX to the ISR shows the patent family members for one EP patent document includes U.S. Patent No. 5,551,484 and the patent family member for the other EP patent document includes U.S. Patent No. 5,959,176.

Applicants are also submitting a duplicate copy of the third document in the September 2004 IDS and respectfully submit it appears to have been an attachment to the December 3, 2002 Office Action. The third document appears to relate to a sequence that is also printed in U.S. Patent No. 5,959,176. Also enclosed herewith is another 1449 form which lists the three documents being re-submitted. It is respectfully requested that the present Examiner carefully consider each of the documents enclosed herewith and indicate that this has been done by initialing the appropriate lines next to each of the listed documents. Applicants do not believe that an IDS fee is due. However, if such a fee is now due to assure consideration of the earlier cited material, such fee can be charged to our deposit account 06-1135 regarding our order number 7372/70911.

The Rejections

On page 3 of the Office Action, the Examiner rejects all pending claims under 35 U.S.C. § 112, second paragraph. Claims 1 and 16 (and by dependence, claims 3, 4, 6-10 and 13-15) are rejected based upon the allegation that it is unclear what various phrases in part (b) of the claim are intended to modify. In particular, the Examiner suggests that it is unclear whether the phrase "which contains the nucleotide sequence shown in SEQ ID NO:24" refers to "the DNA" or to the "nucleotide sequence in which one or more bases are deleted, substituted, or added in the nucleotide sequence shown in SEQ ID NO:1."

In response, Applicants have amended claims 1 and 16 without prejudice and without creating any prosecution history estoppel. Applicants believe that there should not be any confusion as to what the phrases used in part (b) of the claim are modifying. For example, it should be clear that the phrase "which contains the nucleotide sequence shown in SEQ ID NO:24" is referring to the modified nucleotide sequence in which one or more bases have been deleted, substituted or added. Applicants therefore respectfully request reconsideration and withdrawal of the rejection under § 112, second paragraph.

The Examiner also rejects claims 8 and 9 because they are dependent upon cancelled claim 5. Claim 10 is rejected because it is also indirectly dependent on claim 5. In response, Applicants have amended claims 8 and 9 so that they are now dependent upon claim 15 rather

than claim 5. It is therefore respectfully submitted that the Examiner's rejection has been obviated.

Conclusion

In light of the amendments and discussion above, Applicants respectfully submit that the Examiner's rejection of claims under 35 U.S.C. § 112 has been overcome. It is therefore respectfully requested that this rejection be withdrawn and that the claims presently pending in the application be allowed.

If, in the opinion of the Examiner, a phone call may help to expedite the prosecution of this application, the Examiner is invited to call one of Applicants' undersigned attorneys.

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY

Kendrew H. Colton Reg. No. 30, 368

Michael A. Sanzo, PhD.

Reg. No. 36,912

Attorneys for Applicants

1801 K Street, N.W., Suite 401L Washington, DC 20006-1201 Telephone: (202) 419-7000

BEST AVAILABLE COPY

		_					. "				Sheet _1	l of	1	
₩,	+4		•					(F)	Docket Number 7372/70911		Application 09/806,	n Numbe		
. F	ORM P E	IN	ON D AN A	ISCI APPL	LOS	URE	Q T	ATION CONTROL TO THE	Applicant NISHIKAWA et al.					
1	'	(USU)	-/-	l shee	ts if n	ecess	_	E /	March 27, 2001		Group Art			
	0 1		<u> </u>			_	<u> </u>	ENTE BORATE	ENT DOCUMENTS					
EXAMINER INITIAL & TRADE WIND CUMENT NUMBER							,	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROP.		
1/m/	5	3	5	2	6	0	5	10/1994	Farley et al.					
	-	-												
												d		
	ļ											1		
	-													
							\dashv						·	
		1	1			i	—— F	OREIGN PAT	TENT DOCUMENTS					
								DATE	COUNTRY	CLASS	SUB	Translation		
										02.00	CLASS	Yes	No	
					· .									
							_							
							\dashv					_		
					*			OTHER	DOCUMENTS (Including	g Author, Title, Dat	te. Pertinent	Pages F	tc.)	
											<u> </u>	- ugoo, L		
		_												
	···												$-\parallel$	
											·	<u> </u>		
	1.		.4.0	<u>-</u>				· · · · · · · · · · · · · · · · · · ·						
EXAMINER	n		1M	<i>V</i>	•	_					NSIDERED Vov. 2002			
EXAMINER: In considered, Inc	itial if c	itation	consi	idered	l, whet	ther or	not ci	tation is in conformation to the	nance with MPEP § 609; Draw line	through citation if r	not in confor	mance ar	nd not	

		ark Office				PE	102g		27806			559	065		1
	ATIO LICAI	N DISCLOSUF	RE STA	TEM	ENC) 15		Applicant	t: NISH	IKAWA,	Satomi	et al			
, r (F)	LICAI	•				MR	(A)	Appln. No				:			
					/	PATENT &	TRACE	Filing Da		h 22. 20	01				
Date: Mai	ch 27	, 2001	Page	1	of	1		Examine	r. Loek)	Gro	up Art l	Jnit:	1636	
and the second second second	Charles Market and the	OCUMENTS.						er - Ayyy ase gas eg y - Ey y Alas eg ere - Anas en San San	Tare eventure C. D. S. T. Sala						
Examiner	ı	Document		Date		Name					Clas	s Sub)	Filing	
3		Number		MM/Y	YYY	(Family	Name	of First Inv	ventor)			Cla	ss	Date	
nitials*			·											(if approp	oriate
	AR														
	BR														
	CR								•				1	 	
	DR												#		
	ER													 	
	FR												•	 	
	GR					 					8			+	
	HR							· .			V	7		-	
	IR					1								+	
	JR										+				
	KR													+	
	LR									· · · · · · · · · · · · · · · · · · ·					
	MR													+	
2455(p 51,2101 196(6))	NR	######################################		\$30000			2000 NG		0.000.00000000000000000000000000000000	9499997000000007 14869444		English		Translat	tion
<u> </u>		Document Number			Coun			ventor Name		: <u>1</u> 458, 27352,514581	6879 8 387 <u>5</u> 8827688	Abstract		Readily Available	
	<u> </u>											Enclose	d No	Enclose) No
M	OR	1	4		EUR	DPE	S. Torikai				-		-	 	+
ymy-	PR	0 659 884 A 2	06/199	5	EUR	DPE	M.Ya	mamoto			-			┼	+-
	QR						_					-	-	 	+
	RR		ļ		<u>-</u>	<u></u>	_						-	+	+
	SR													 	+
	TR												-		+
	UR		ļ									-		+	+
	VR											 	+	 	+
	WR		 									 		+	+
**************************************	JXR	rana ubwidayaniya waxay	E336×8×6188×6184	er Rada gibergia		Galas Section 1942	1	. se seune parit (1911)		adheanne e s	and the same of the			-	+
OTHER (ngrin this order A	Author,	litle, F	eriod	ıcal Nan	ne; Dat	e;;Hertiner	nt Rage:	s; etc.)					
	YR							 				1	-	+	+
	ZR											-	-	+	+
	AAR					<u>-</u>						 	+-	+	+
	BBR			·								 	+	+	+
	11 .1 .1 H	· -	·									 	-	+	+
	DDR												i	1	- 1